WHAT IS CLAIMED IS

What is claimed is:

1.   A method of generating a binary mixed raster content selector signal for image compression of a full color source image defined by a plurality of pixels comprising the steps of:

(a)   creating a multi-bit selector signal that encodes the direction and strength of edges;

(b)   filtering the multi-bit selector signal; and

(c)   binarizing the filtered multi-bit selector to produce a binary mixed raster content selector signal.

2.   The method according to Claim 1 wherein creating a multi-bit selector signal further comprises the step of determining if a pixel is pre-segmented as an 'Image' pixel.

3.   The method according to Claim 1 wherein creating a multi-bit selector signal further comprises the step of determining if a pixel is white then multi-bit select signal equals strong background.

4.   The method according to Claim 1 wherein creating a multi-bit selector signal further comprises the step of determining if a 3x3 neighborhood contains white then multi-bit select signal equals strong foreground.

5.   The method according to Claim 1 wherein creating a multi-bit selector signal further comprises the step of determining if a pixel is black then multi-bit select signal equals strong foreground.

6. The method according to Claim 1 wherein creating a multi-bit selector signal further comprises the step of determining if the 3x3 neighborhood contains black then multi-bit select signal equals strong background.

7. The method according to Claim 1 wherein creating a multi-bit selector signal further comprises the step of determining if the 3x3 neighborhood contains exactly 2 classes of pixels then multi-bit select signal equals if the center class is darker then strong foreground else strong background.

8. A method of generating a binary mixed raster content selector signal for image compression of a full color source image defined by a plurality of pixels comprising the steps of:

    (a) creating a multi-bit selector signal that encodes the direction and strength of edges;

    (b) filtering the multi-bit selector signal;

    (c) binarizing the filtered multi-bit selector to produce a binary mixed raster content selector signal;

    (d) determining if a pixel is white then multi-bit select signal equals strong background or foreground; else

    (e) determining if a 3x3 neighborhood contains white then multi-bit select signal equals strong foreground or background; else

    (f) determining if the pixel is black then multi-bit select signal equals strong

    foreground or background; else

    (g) determining if the 3x3 neighborhood contains black then multi-bit select signal equals strong background or foreground; else

    (h) determining if the 3x3 neighborhood contains exactly 2 classes of pixels and the center pixel belongs to a darker class then the multi-bit select signal is strong foreground or background; else

    (i) determining if the 3x3 neighborhood contains exactly 2 classes of

pixels and the center pixel belongs to a lighter class then the multi-bit select signal is strong background or foreground; else

        (j)   multi-bit selector equals a weak signal.

     9.   A system for image compression of a full color source image defined by a plurality of pixels comprising:

        (a)   means for creating a multi-bit selector signal that encodes the direction and strength of edges;

        (b)   means for filtering the multi-bit selector signal; and

        (c)   means for binarizing the filtered multi-bit selector to produce a binary mixed raster content selector signal.

     10.   The system according to Claim 9 further comprising means for creating a multi-bit selector signal further comprises the step of determining if a pixel is pre-segmented as an 'Image' pixel.

     11.   The system according to Claim 9 further comprising means for creating a multi-bit selector signal further comprises the step of determining if a pixel is white then multi-bit select signal equals strong background.

     12.   The system according to Claim 9 further comprising means for creating a multi-bit selector signal further comprises the step of determining if a 3x3 neighborhood contains white then multi-bit select signal equals strong foreground.

     13.   The system according to Claim 9 further comprising means for creating a multi-bit selector signal further comprises the step of determining if a pixel is black then multi-bit select signal equals strong foreground.

14. The system according to Claim 9 further comprising means for creating a multi-bit selector signal further comprises the step of determining if the 3x3 neighborhood contains black then multi-bit select signal equals strong background.

15. The system according to Claim 9 further comprising means for creating a multi-bit selector signal further comprises the step of determining if the 3x3 neighborhood contains exactly 2 classes of pixels then multi-bit select signal equals if the center class is darker then strong foreground else strong background.